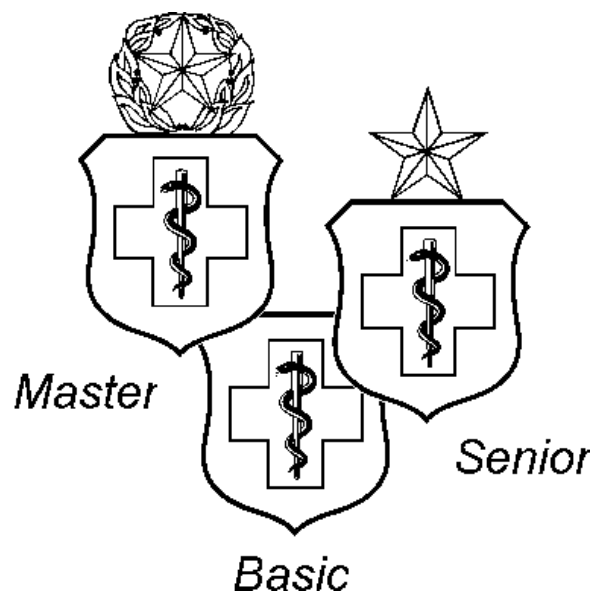


STUDYGUIDE

IMMUNIZATION BACK-UP TECHNICIAN STUDYGUIDE

1 April 2000



Air Education and Training Command

82D TRAINING WING

882d Training Group

383d Training Squadron

Sheppard Air Force Base, Texas 76311-2262

Designed for AETC Course Use

NOT INTENDED FOR USE ON THE JOB

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Congratulations! Your unit has selected you for training as an Immunization Back-up technician for your unit of assignment.

Today's Air Force responds to, and supports, numerous deployment sites around the world. The hazards of biological/chemical exposure is a reality which threatens every Air Force member each time we are called upon to perform our duty. This studyguide will provide information pertaining to Active Duty immunizations and administrations as well as the management of adult, adolescent, and pediatric immunizations. As the Air Force continues to assign its members around the world, the training you will receive from this program will ensure Readiness of the Air Force through "Force Protection".

Instructions to the Students

1. In this studyguide, the subject matter is divided into self-contained units. A unit menu begins each unit, identifying the lesson headings and section numbers. After reading the unit menu page and unit introductions, study the section, and answer the unit review self-test questions. Each question identifies the section the question came from. After completing the review, find the correct answer in the section from which the-question came
2. At the end of selected units you will find attached Qualification Training Packages (QTPs). Use these QTPs to complete the required hands on training necessary to complete this course. The allergy/immunization (4N0X1A) technician or trained immunization provider assigned to your facility/unit will conduct and verify completion of this training. You can complete the QTP's as you finish each unit or all at once after you complete this studyguide.
3. Following the completion of both, the studyguide and QTP training, you are required to pass the written test, minimum passing 70%, administered by the staff development/training office located at your facility/unit. You will then be issued a certificate of training. Annotate completion of this training on the back-side of the AF Form 623 located in Part II, Section A of your "Enlisted Training and Competency Folder".

****** You must include the above mentioned QTP in your annual QTP refresher training.

****** For those selected to attend J3ACR4N071, Medical Service Craftsman Course, you must complete this studyguide and QTP training in addition to the 7-level Read Ahead Module (RAM) prior to attending the resident course. You will be administered the end-of-course test prior to graduation from the resident course.

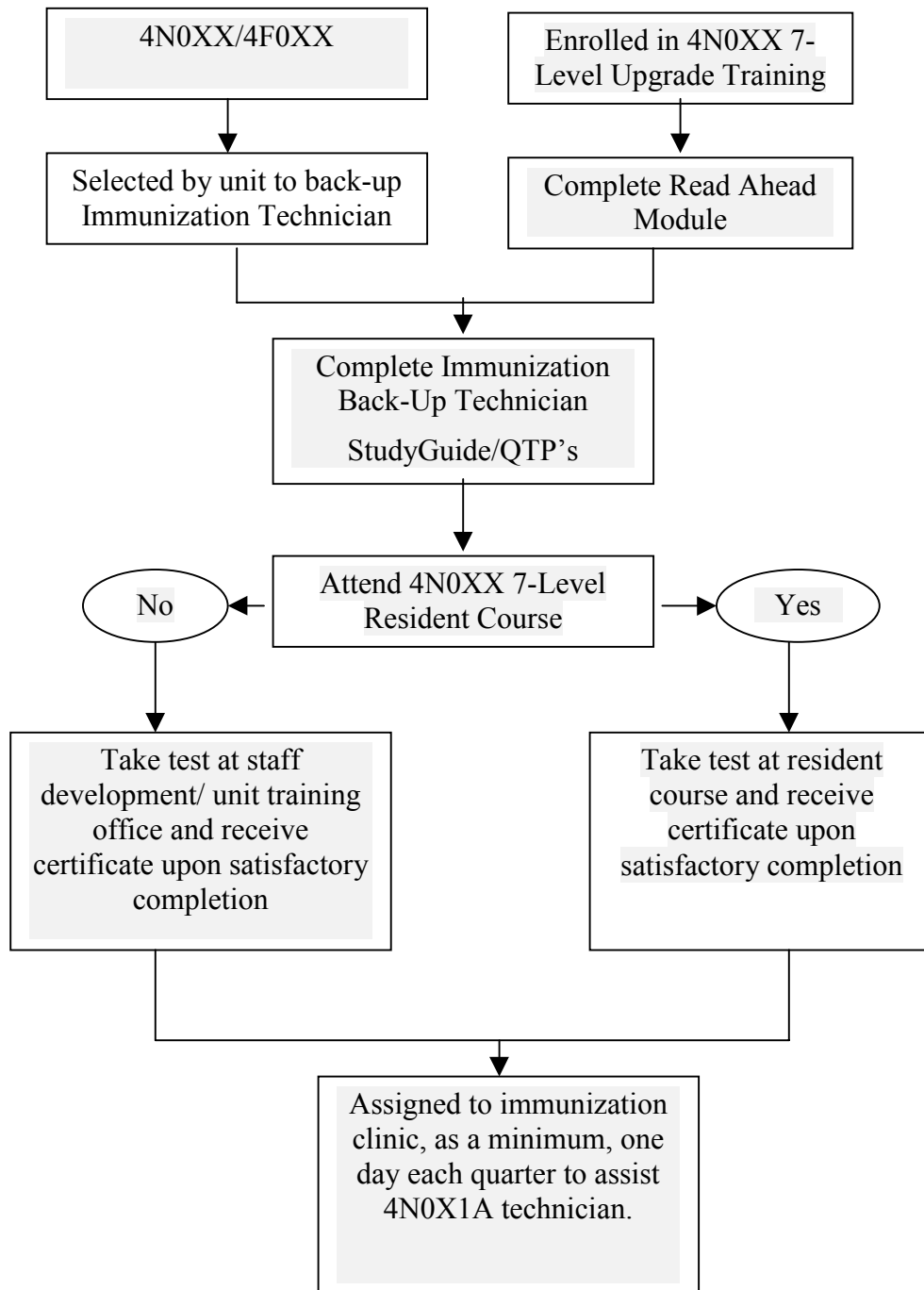
To get an *immediate response* to your questions concerning subject matter in this course, call the Allergy/Immunization Course Point of Contact at DSN 285-7813 or commercial (301) 319-7813/12 between 0730 and 1630 (EST), Monday through Friday. Otherwise, write the author at the address below to point out technical errors you find in the text or Course Examination.

Walter Reed Army Medical Center, Allergy/Immunization Course
ATTN: TSgt Ray Anspach or SSgt Christina Armstrong
Walter Reed Army Medical Center, Washington D.C., 20307-5001

For further information, immunization updates, and erratta pages for this studyguide go to the 383d Training Squadron website link at

<http://sg-www.satx.disa.mil/school/>

Immunization Back-Up Technician Training FlowChart



Glossary

Terms

Active Immunization: Active immunization is a procedure used to stimulate antibody production by the administration of a specific antigen in an effort to thwart a specific pathogen or clinical disease in the future.

Antigen(s): Substance(s) capable of inducing formation of antibodies.

Anti-toxin: A solution of antibodies prepared from the serum of animals immunized with specific antigens (diphtheria, tetanus) and used to achieve short term passive immunity in humans who may lack protective antibodies.

Immune Globulin (IG): Immune serum globulin (ISG) is a sterile solution containing antibodies obtained from large pools of human blood plasma.

Immunoglobulins (Ig): All serum globulins with antibody activity are referred to as immunoglobulins (Ig).

Passive Immunization: Passive immunization is the administration of specific preformed antibodies (Immunoglobulins).

Specific Immune Globulin: Special preparations obtained from donor pools preselected for a high antibody content against a specific disease.

- Hepatitis B immune globulin (HBIG)
- Varicella-zoster immune globulin (VZIG)
- Rabies immune globulin (RIG)
- Tetanus immune globulin (TIG)

Toxoid: A bacterial toxin that has been rendered nontoxic, but retains the ability to stimulate the formation of an appropriate antibody.

Vaccine: A vaccine is a suspension of killed or live-attenuated microorganisms (or a component of them) that when given by an appropriate route and in an appropriate number of doses builds a heightened state of resistance to a specific infectious disease.

Vaccination and Immunization: Today these terms are often used interchangeably. They refer to materials that induce immunity or protection from disease.

Abbreviations and Acronyms

The abbreviations and acronyms listed below are the current approved abbreviations and acronyms authorized by the Center for Disease Control (CDC) and the Advisory Committee on Immunization Practices (ACIP). In the first column to the left of each abbreviation/acronym is the corresponding database entry number for use in all computer-tracking programs.

Code	Short Description	Full Vaccine Name
1	DTP	diphtheria, tetanus toxoids and pertussis vaccine
2	OPV	poliovirus vaccine, live, oral
3	MMR	measles, mumps and rubella virus vaccine
4	M/R	measles and rubella virus vaccine
5	measles	measles virus vaccine
6	rubella	rubella virus vaccine
7	mumps	mumps virus vaccine
8	Hep B, adolescent or pediatric	hepatitis B vaccine, pediatric or pediatric/adolescent dosage Written in Shot record with brand name i.e. Recombivax or Engerix
9	Td (adult)	tetanus and diphtheria toxoids, adsorbed for adult use
10	IPV	poliovirus vaccine, inactivated
11	pertussis	pertussis vaccine
12	diphtheria antitoxin	diphtheria antitoxin
13	TIG	tetanus immune globulin
14	IG, NOS	immune globulin, NOS
15	influenza, split (incl. purified surface antigen)	influenza virus vaccine, split virus (incl. purified surface antigen)
16	influenza, whole	influenza virus vaccine, whole virus
17	Hib, NOS	<i>Haemophilus influenzae</i> type b vaccine, conjugate NOS
18	rabies, intramuscular injection	rabies vaccine, for intramuscular injection Written in shot record as HDVC or Rabies vaccine
19	BCG	Bacillus Calmette-Guerin vaccine
20	DTaP	diphtheria, tetanus toxoids and acellular pertussis vaccine
21	varicella	varicella virus vaccine Written in shot record as Varivax
22	DTP-Hib	DTP- <i>Haemophilus influenzae</i> type b conjugate vaccine Use brand name of vaccine i.e. Tetramune
23	plague	plague vaccine
24	anthrax	anthrax vaccine

25	typhoid, oral	typhoid vaccine, live, oral Can be written as Ty21a in shot record
26	cholera	cholera vaccine
27	botulinum antitoxin	botulinum antitoxin
28	DT (pediatric)	diphtheria and tetanus toxoids, adsorbed for pediatric use
29	CMVIG	cytomegalovirus immune globulin, intravenous
30	HBIG	hepatitis B immune globulin
31	Hep A, pediatric, NOS	hepatitis A vaccine, pediatric dosage, NO Use brand name when annotating in shot record
32	meningococcal	meningococcal polysaccharide vaccine May be annotated as Menamune
33	pneumococcal	pneumococcal vaccine Annotate in shot record as Pnumovax 23
34	RIG	rabies immune globulin
35	tetanus toxoid (TT)	tetanus toxoid
36	VZIG	varicella zoster immune globulin
37	yellow fever	yellow fever vaccine (Yellow fever has it's own page in a shot record and requires a certification stamp and your signature)
38	rubella/mumps	rubella and mumps virus vaccine No longer manufactured but may be seen in shot records as MR
39	Japanese encephalitis	Japanese encephalitis vaccine
40	rabies, intradermal injection	rabies vaccine, for intradermal injection
41	typhoid, parenteral	typhoid vaccine, parenteral, other than acetone-killed, dried Written in shot record as Typhum-Vi
42	Hep B, adolescent/high risk infant	hepatitis B vaccine, adolescent/high risk infant dosage NOTE: Always use manufacture brand name when using Hep B vaccine
43	Hep B, adult	hepatitis B vaccine, adult dosage
44	Hep B, dialysis	hepatitis B vaccine, dialysis patient dosage
45	Hep B, NOS	hepatitis B vaccine, NOS
46	Hib (PRP-D)	<i>Haemophilus influenzae</i> type b vaccine, PRP-D conjugate
47	Hib (HbOC)	<i>Haemophilus influenzae</i> type b vaccine, HbOC conjugate
48	Hib (PRP-T)	<i>Haemophilus influenzae</i> type b vaccine, PRP-T conjugate
49	Hib (PRP-OMP)	<i>Haemophilus influenzae</i> type b vaccine, PRP-OMP conjugate
50	DTaP-Hib	DTaP- <i>Haemophilus influenzae</i> type b conjugate vaccine Utilize brand name in shot record

51	Hib-Hep B	<i>Haemophilus influenzae</i> type b conjugate and Hepatitis B vaccine Written in shot record as Comvax
52	Hep A, adult	hepatitis A vaccine, adult dosage NOTE: Always use brand name when administering Hep A vaccine
53	Typhoid, Parenteral, AKD (U.S. Military)	Typhoid Vaccine, Parenteral, Acetone-Killed, Dried (U.S. Military)
54	Adenovirus, Type 4	Adenovirus Vaccine, Type 4, Live, Oral
55	Adenovirus, Type 7	Adenovirus Vaccine, Type 7, Live, Oral
56	Dengue Fever	Dengue Fever Vaccine
57	Hantavirus	Hantavirus Vaccine
58	Hep C	Hepatitis C Vaccine
59	Hep E	Hepatitis E Vaccine
60	Herpes Simplex 2	Herpes Simplex Virus, Type 2 Vaccine
61	HIV	Human Immunodeficiency Virus Vaccine
62	HPV	Human Papilloma Virus Vaccine
63	Junin Virus	Junin Virus Vaccine
64	Leishmaniasis	Leishmaniasis Vaccine
65	Leprosy	Leprosy Vaccine
66	Lyme Disease	Lyme Disease Vaccine Written As Lymrix In The Shot Record (Brand Name)
67	Malaria	Malaria Vaccine
68	Melanoma	Melanoma Vaccine
69	Parainfluenza-3	Parainfluenza-3 Virus Vaccine
70	Q Fever	Q Fever Vaccine
71	RSV-IGIV	Respiratory Syncytial Virus Immune Globulin, Intravenous
72	Rheumatic Fever	Rheumatic Fever Vaccine
73	Rift Valley Fever	Rift Valley Fever Vaccine
74	Rotavirus	Rotavirus Vaccine, Tetravalent, Live, Oral
75	Smallpox	Smallpox Vaccine Not Currently Given But Should Be Transcribed. A Dash Should Be Drawn Across The Dose Block In The Shot Record.
76	<i>Staphylococcus</i> Bacterio Lysate	<i>Staphylococcus</i> Bacteriophage Lysate
77	Tick-Borne Encephalitis	Tick-Borne Encephalitis Vaccine
78	Tularemia Vaccine	Tularemia Vaccine
79	Vaccinia Immune Globulin	Vaccinia Immune Globulin
80	VEE, Live	Venezuelan Equine Encephalitis, Live, Attenuated
81	VEE, Inactivated	Venezuelan Equine Encephalitis, Inactivated
82	Adenovirus, NOS	Adenovirus Vaccine, NOS

83	Hep A, Ped/Adol, 2 Dose	Hepatitis A Vaccine, Pediatric/Adolescent Dosage, 2 Dose Schedule
84	Hep A, Ped/Adol, 3 Dose	Hepatitis A Vaccine, Pediatric/Adolescent Dosage, 3 Dose Schedule
85	Hep A, NOS	Hepatitis A Vaccine, NOS
86	IG	Immune Globulin, Intramuscular
87	IGIV	Immune Globulin, Intravenous
88	Influenza, NOS	Influenza Virus Vaccine, NOS
89	Polio, NOS	Poliovirus Vaccine, NOS
90	Rabies, NOS	Rabies Vaccine, NOS
91	Typhoid, NOS	Typhoid Vaccine, NOS
92	VEE, NOS	Venezuelan Equine Encephalitis Vaccine, NOS

4N0X1A References (STS area 14)

Note: All references listed imply the current edition of the publication.

AFI 44-102, Community Health Program

AFI 48-115, The Tuberculosis Detection and Control Program

AFJI 48-110, Immunization and Chemoprophylaxis

- All official DoD, Air Force, and MAJCOM publications, to include this CFETP.
- Manufacturer's operating instructions for equipment as applicable.
- Allergic Diseases Diagnosis and Management (Patterson).
- Allergy Principles and Practice, Volumes I and II (Middleton).
- Allergy/Clinical Immunology Technician Course Manual (Walter Reed Army Medical Center).
- General Recommendations on Immunization, Recommendations of the Advisory Committee on Immunization Practices (ACIP).
- Health Information for International Travel (U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Infectious Diseases).
- ImmunoFacts Vaccines and Immunologic Drugs (Grabenstein).
- Morbidity and Mortality Weekly Report (Centers for Disease Control).
- Mosby's Textbook for Nursing Assistants (Sorrentino).

- Red Book Report of the Committee on Infectious Diseases (American Academy of Pediatrics).
- The Lippincott Manual of Nursing Practice (Suddarth).

Please read the unit menu for Unit 1 and begin